



Bill of Materials for the NCP3011GEVB Evaluation Board

Designator	Quantity	Description	Value	Tolerance	Footprint	Manufacturer	Manufacturer Part Number	Substitution Allowed	Lead Free
C1 C1A	2	Electrolytic Capacitor, Low ESR	470uF	20%	10 X 16 mm, 5 mm lead, radial	Panasonic	EEUFM1E471	Yes	Yes
C2-3	2	25V, Ceramic Chip Capacitor	22uF 25V	20%	1812	TDK	C4532X5R1E226M	Yes	Yes
C4 C6	2	Ceramic Chip Capacitor	1uF	10%	1206	TDK	C3216X7R1E105K/0.85	Yes	Yes
C5	1	Ceramic Chip Capacitor	0.1uF	10%	1206	TDK	C3216X7R1H104K	Yes	Yes
C7	1	Ceramic Chip Capacitor	56pF	5%	0603	TDK	C1608C0G1H560J	Yes	Yes
C8	1	Ceramic Chip Capacitor	12nF	5%	0603	Murata	GRM188R71H123KA01D	Yes	Yes
C9	1	Ceramic Chip Capacitor	0.1 uF	10%	0805	TDK	C2012X7R1H104K	Yes	Yes
C10	1	Ceramic Chip Capacitor	2200 pF	10%	0805	AVX	08055C222KAT2A	Yes	Yes
C11-12	2	Ceramic Chip Capacitor	22uF	20%	1210	TDK	C3225X5R1A226M	Yes	Yes
C13	1	Electrolytic Capacitor, Low ESR	220 uF	20%	10 X 12.5 mm, 5 mm lead, radial	United Chemi-con	EKZE350ELL221MJC5S	No	Yes
C14	1	Ceramic Chip Capacitor	0.1uF	10%	0805	TDK	C2012X7R1H104K	Yes	Yes
C15-16	0	Ceramic Chip Capacitor	DNP	-	0805	-	-	-	-
C17	1	Ceramic Chip Capacitor	1nF	10%	0603	TDK	C1608X7R1H102K	Yes	Yes
C18	0	Ceramic Chip Capacitor	DNP	-	0603	-	-	-	-
Q1	1	Triple Use Footprint; SO8/SO8FL/DPAK MOSFET	30V, SO8FL	-	DPAK/SO8FL	ON Semiconductor	NTMFS4841T1G	No	Yes
Q2	1	Triple Use Footprint; SO8/SO8FL/DPAK MOSFET	30V, SO8FL	-	DPAK/SO8FL	ON Semiconductor	NTMFS4935NT1G	No	Yes
D2	1	Schottky Barrier Diodes	0.35 Vf	-	SOD123	ON Semiconductor	BAT54T1G	No	Yes
D1	0	Schottky Barrier Diodes	DNP	-	SOD123	-	-	-	-
L1	1	SMT Inductor	3.3 uH	30%	12.3 X 12.3mm	Coilcraft	MSS1260-332NL	No	Yes
U1	1	<b>Synchronous PWM Controller</b>	<b>28 V 400 kHz</b>	-	<b>TSSOP-14</b>	<b>ON Semiconductor</b>	<b>NCP3011DTBR2G</b>	<b>No</b>	<b>Yes</b>
R1	1	SMT Resistor	3.16k	1%	0603	Vishay/Dale	CRCW06033K16FKEA	Yes	Yes
R2 R4	2	SMT Resistor	1k	1%	0603	Vishay/Dale	CRCW06031K00FKEA	Yes	Yes
R3	1	SMT Resistor	4.87k	1%	0603	Vishay/Dale	CRCW06034K87FKEA	Yes	Yes
R5	1	SMT Resistor	100k	5%	0603	Vishay/Dale	CRCW0603100KJNEA	Yes	Yes
R6	1	Resistor	12k	1%	1206	Vishay/Dale	CRCW120612K0FKEA	Yes	Yes
R7 R14 R15 R18	4	SMT Resistor	0R0	Jumper	0603	Panasonic - ECG	ERJ-3GEY0R00V	Yes	Yes
R8 R11	2	Resistor	0R0	Jumper	1206	Panasonic - ECG	ERJ-8GEY0R00V	Yes	Yes
R9	1	SMT Resistor	10.2k	5%	0603	Vishay/Dale	CRCW060310K0JNEA	Yes	Yes
R10	1	Resistor	1R0	-	1206	Vishay/Dale	CRCW12061R00FKEA	Yes	Yes
R12 R16	2	SMT Resistor	22.6k	1%	0603	Vishay/Dale	CRCW060322K6FKEA	Yes	Yes
R13 R17	0	SMT Resistor	DNP	-	0603	-	-	-	-
JP	1	Generic 2 PIN SIP Header 0.100" Centers	-	-	0.100" Centers	Mill-Max	800-10-002-10-001000	Yes	Yes
BST COMP EN FB FR FT GND-1 4 GND-P GND- P1 GND-S GND- S1 PG SYNC VIN P VIN-S VOUT-P VOUT-S VPG VREF VSW	23	Printed Circuit Pins	-	-	0.040 DIA	Mill-Max	6821-0-00-15-00-00-08-0	Yes	Yes